IDAHO'S ARTHRITIS ACTION PLAN

November 2000

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Idaho Department of Health & Welfare
Bureau of Health Promotion
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Preface

The Idaho Department of Health and Welfare and the Arthritis Advisory Council are pleased to present **Idaho's Arthritis Action Plan.** Arthritis is increasingly recognized as a pressing public health problem. It effects nearly one of every six Americans and is the leading cause of disability in the U.S. It poses a rising economic burden in healthcare costs. Arthritis effects the quality of life for the person who experiences the painful symptoms and resulting disability, as well as their family members and caregivers.

Idaho's Arthritis Action Plan represents a call to action to reverse the increasing number of persons with arthritis and improve the quality of life for those with or affected by arthritis. This plan is a framework for action. It reflects the need to build the systems and networks necessary to address arthritis in Idaho. It challenges us to work as partners to address arthritis in communities throughout Idaho. It will take the coordinated efforts between policy makers, the public health system, the medical care system, voluntary organizations, and businesses to achieve the goals and objectives of this plan. We believe this plan will help achieve better health for people in Idaho.

The Department of Health and Welfare extends its gratitude and appreciation to the people who served on the planning committee and contributed their time and expertise. Your efforts demonstrate a commitment to reduce the burden of arthritis in Idaho and improve the lives and well being of Idahoans.

Sincerely,

Richard H. Schultz, Administrator
Division of Health
Idaho Department of Health and Welfare

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Executive Summary

The term arthritis encompasses over 120 diseases and conditions that affect joints, surrounding tissue and other connective tissue. Arthritis is the leading cause of disability in the United States and contributes to the rising medical burden. Total medical costs associated with arthritis in the U.S. are $65 billion annually.

Arthritis prevalence estimates in Idaho for the year 2000:
- 179,000 Idahoans or 14% of the population have arthritis
- 2.4% of the population have activity limitation due to arthritis

Projections for the year 2020:
- 265,000 Idahoans or 16.6% of the population will have arthritis
- 3.0% of the population will have activity limitation due to arthritis

The goal of the *Idaho Arthritis Action Plan* is "To reduce the occurrence, impairment, activity limitation, and restriction in social participation due to arthritis and other rheumatic conditions in Idaho." The Arthritis Advisory Council chose three target populations for intervention strategies including persons affected by arthritis ages 45 to 64, healthcare providers, and the general public. Settings for interventions will include communities, healthcare settings and worksites.

Five priority areas and strategic directions were selected. Objectives and evaluation measures were determined for each. A five-year activity plan was created to guide efforts to achieve the goals and objectives of the state plan. The priority areas include:

- **Partnership**- Form partnerships with organizations, and individuals with vested interests in arthritis to address the burden of arthritis throughout Idaho.
- **Communication and Education**- Dispel myths and raise awareness about arthritis, its risk factors, prevention, importance of early diagnosis, appropriate treatment and self-management.
- **Programs, Policies and Systems**- Identify and implement programs, policies, health systems and infrastructure needed to support arthritis prevention and control.
- **Surveillance and Epidemiology**- Collect, analyze, interpret and report on arthritis health data and the physical, social and economic burden of arthritis. Data will guide planning, implementation and evaluation of public health practice.
- **Evaluation**- Monitor program progress and the achievement of the established goals and objectives.

Introduction

The word "arthritis" literally means joint inflammation, that is, swelling, redness, heat and pain caused by tissue injury or disease in the joint.[16] Arthritis encompasses over 120 diseases and conditions that affect joints, surrounding tissue and/or other connective tissues. These diseases include rheumatoid arthritis, juvenile rheumatoid arthritis, osteoarthritis, fibromyalgia, gout, bursitis, rheumatic fever, and lupus. The most common forms of arthritis are osteoarthritis, rheumatoid arthritis, and fibromyalgia.[3]

Burden of Arthritis

Arthritis and other rheumatic conditions are the leading cause of disability in the United States.[15] Forty-three million Americans or one out of every six people are affected by arthritis.[20] Arthritis often limits the everyday activities of more than seven million Americans, deprives people of their freedom and independence, and disrupts the lives of family members and other caregivers.[3] Disabilities from arthritis create enormous health care costs for individuals, their families, and the nation. In 1997, there were 39 million arthritis-related physician visits, more than 744,000 hospitalizations, and 44 million ambulatory care visits in the U.S.[14,15] The estimated medical care costs for people with arthritis total $15 billion annually. In 1992, total costs (medical care and lost productivity) were estimated at almost $65 billion.[21]

Prevalence of Arthritis in Idaho

National Health Interview Survey (NHIS) household interview data were collected between 1989-1991. A study was done to determine state specific estimates and projections of arthritis prevalence. The study results estimated that by the year 2000, 13.9 percent of Idahoans would have arthritis and 2.4 percent of the population would have activity limitation due to arthritis. Rates in Idaho are projected to increase to 16.6 percent of the population having arthritis and 3.0 percent with activity limitations by the year 2020. This translates to 179,000 people with arthritis in Idaho in the year 2000 increasing to 265,000 Idahoans in 2020.[11]

Risk Factors for Arthritis

Nonmodifiable risk factors or "fixed factors" for the development of arthritis include female gender, older age, and genetic predisposition.[3] Modifiable risk factors for arthritis include obesity and physical inactivity. Joint injuries, infections, and certain occupations with repetitive knee bending or repetitive joint movements are also contributing factors.

Gender

Women age 15 years or older account for 60 percent of arthritis cases in the U.S. Arthritis is the most common self-reported chronic condition among women (22.75 million) ranking ahead of hypertension (15.7 million), and ischemic heart disease (2.4 million). Arthritis was listed as the most common condition responsible for activity limitations (4.6 million), followed by orthopedic deformity (3.7 million) and hypertension (1.9 million).[12] Women with arthritis reported an average of 4.4 more unhealthy days in the preceding twelve months than women without arthritis. Men with arthritis reported an average of 4.6 more unhealthy days than men without arthritis.[15]

Age

Half of the elderly population across the nation is affected by arthritis and the risk of developing arthritis increases with age. Self-reported arthritis increased directly with age for women with 8.6 percent of women ages 15-44, 33.5 percent for women aged 45-64, and 55.8 percent for women aged 65 or older reporting symptoms.[15]

Although older age is a risk factor for arthritis, it is not just an old person's disease. Nearly three of every five people with arthritis are younger than 65 years old.[20] U.S. hospital discharge data from 1997 shows that people under age 65 accounted for 44.2 percent of the 744,000 arthritis related discharges.[14] Juvenile rheumatoid arthritis is one of the most common chronic illnesses of childhood.[3]

Genetic Predisposition

Research indicates certain genes may play a role in the immune system and genetics may be associated with the development of some forms of arthritis such as rheumatoid arthritis, ankylosing spondylitis and lupus.[4,17] The exact role of genetics and the interaction of other factors, such as the role of hormones and environmental factors, have not been determined. Research continues to investigate these and other causes of the many forms of arthritis.[4]

Physical Inactivity

For the person with arthritis an appropriate exercise program is very important. Being inactive may increase arthritis problems. Many people who have arthritis are less fit, weaker, less flexible and have more pain than necessary due to the complications attributed to inactivity. A comprehensive exercise program for persons with arthritis includes flexibility, strengthening and aerobic activities. The nature of the program should be determined with the knowledge and support of the appropriate health professionals.[2] The 1996 Idaho Behavioral Risk Factor Surveillance System shows that 57 percent of adult Idahoans do not exercise regularly.[9]

Overweight and Obesity

Maintaining an appropriate weight or reducing weight to an appropriate level lowers a person's risk for some forms of arthritis.[3] Overweight or obese individuals are at increased risk for the development of osteoarthritis.[18] Obesity is a major risk factor for the development and progression of osteoarthritis of the knee and is associated with an increased prevalence of hip osteoarthritis.[1] An increase in weight is significantly associated with increased pain in weight-bearing joints.[18] From 1988 to 1999 the proportion of overweight and obese adult Idahoans rose from 41.2 percent to 55.2 percent.[6]

Idaho Demographics and High Risk Populations

Idaho consists of 44 counties covering 82,751 square miles of land.[7] Eight of these counties are classified as urban (population center with 20,000 persons or greater), twenty counties are deemed rural (6 or more persons per square mile) and sixteen counties are classified as frontier (fewer than 6 people per square mile). There are seven public health districts that serve Idahoans. Of the 50 states, Idaho ranks 11th in size and ranks 40th in population.[7]

The estimated Idaho census for 1998 was 1,228,684 people. This is a 22 percent increase from 1990, which was the third highest increase in the nation, after Nevada (45.5 percent) and Arizona (27.4 percent).[8] The median age in Idaho is 33.1 years. A large proportion of Idahoans are at risk for developing arthritis by virtue of their age: 32 percent of adults aged 45 and older; 39 percent between the ages of 18 and 44, and 29 percent between the ages of 0 and 17. Arthritis is most common among adults age 45 and older, yet the prevalence of rheumatic diseases often begins between the ages of 18-44.

Individuals with no health insurance in Idaho averaged 15.3 percent between 1991 and 1997. Between 1995 and 1997 the percent of

individuals receiving no primary care was 19.9 percent. The Idaho Medical Association reports 2,259 licensed physicians practicing in Idaho in 1998 (172 physicians per 100,000 population).[7] During that year there were no full-time physicians located in five of Idaho's counties. Idaho has 29 service areas designated as primary care geographic Health Professional Shortage Areas (HPSAs). There are nine primary care migrant farm worker population group HPSAs. There are five mental health regions designated as Mental Health Professional Shortage Areas, and a combined total of 27 Medically Underserved Areas (MUA) and Medically Underserved Populations (MUP).[7] These statistics indicate the challenges Idaho has with health care delivery systems and providers. (Criteria for these designations include such variables as primary medical care physician-to-population ratio, percentage of the population with incomes below the poverty level, and percentage of the population over age 65).[7]

The most recent poverty status data available are 1993 estimates provided by the U.S. Bureau of the Census. Income estimates for 1993 indicate that an average of 12.5 percent of Idahoans have incomes below the federal poverty level. These levels varied by county from a low of 9.7 percent to a high of more than 20 percent. Income levels are associated with risk of chronic disease and associated risk factors.[7]

Race and Ethnicity

Idaho does not have a large racial and ethnically diverse population. Ninety-seven percent of the population is White; 0.5 percent Black; 1.3 percent American Indian; 1.1 percent Asian/Pacific Islander; and 7.1 percent Hispanic (consisting of any race of Hispanic origin).[7] Culturally appropriate programs and activities can make an impact on the prevalence and quality of life for Idahoans who may develop arthritis. These should include strategies to increase early awareness of arthritis symptoms, early detection, and risk reduction of physical inactivity and obesity.

Arthritis Program Capacity

The Idaho Arthritis Program was established in October of 1999 with funding provided by the Centers for Disease Control and Prevention. Since then the collaboration between the Idaho program and arthritis advocates has been growing. Recruitment contacts for participation on the Arthritis Advisory Council were made statewide throughout November and December of 1999. The Idaho Arthritis Advisory Council was established with 22 initial council members and 7 council liaisons recruited. Membership consists of rheumatologists, nurses, physical and occupational therapists, worksite ergonomic representatives, pharmacists, community senior program representation, health insurance providers, representatives from community hospitals, public health partners, the peer review organization, Medicaid and Medicare representatives, academia, the business community and individuals with arthritis interests.

The Idaho Arthritis Program, within the Bureau of Health Promotion, Division of Health at the Idaho Department of Health and Welfare, serves in the leadership role for the coordination and implementation of the program. Working partnerships with the Bureau of Vital Records and Health Statistics have long been established for the collection, analysis, and dissemination of data. Data collection for arthritis using the Behavioral Risk Factor Surveillance System (BRFSS) has begun. The arthritis questions module was added to the Idaho BRFSS January 2000. Preliminary Idaho-specific data will be available in March of 2001. The BRFSS Quality of Life module questions are scheduled to begin in January of 2001. This data will establish a baseline to provide information on the physical, psychological, and social impact and burden of arthritis in Idaho.

A strong and committed partnership has been established with the Utah/Idaho Chapter of the Arthritis Foundation. The Arthritis Foundation has provided representation at each of the Arthritis Advisory Council meetings. Additional meetings have been held to discuss programs and collaboration on future projects, workshops, resource sharing and recruitment to expand current programs in Idaho.

The first Arthritis Advisory Council planning meeting was held in January 2000. Additional meetings were held in the spring, summer and fall of 2000. A draft of *Idaho's Arthritis Action Plan* and five-year activity plan was created based on the input from the Arthritis Advisory Council and presented to them for additional input, technical review and revision. Advisory Council meetings will continue to be held two to six times per year.

A brochure for the continued recruitment of Advisory Council members was developed. A resource directory is being created and will be available in print and on the Internet to health professionals, people with arthritis, and the general public. Foundations have been laid to include the Arthritis Program on the Idahohealth.org web site, which will include the resource directory, program information and information about partner activities related to arthritis. Approval has been received from the Shoshone-Bannock Tribal Council to establish a working partnership with the Arthritis Program.

Barriers

The Arthritis Foundation shows that only ten rheumatologists practice in Idaho with no pediatric rheumatologists located in Idaho at all. In 1999 the Arthritis Foundation reported 1 Arthritis Self-Help course taught for 18 participants and 3 Fibromyalgia Self-Help courses offered serving 43 Idahoans. There are currently 3 arthritis support groups in Idaho and 6 fibromyalgia support groups. There are 7 fibromyalgia self-help course leaders in Idaho and 3 Arthritis Self-Help Course leaders. All of these groups and leaders are located in the southern part of Idaho. The low numbers of leaders, volunteers, and professionals to teach the courses demonstrate challenges that the Idaho Arthritis Program will face in promoting these programs. Other partnership barriers include the largely rural population spread throughout a large geographic area and the difficulty of partners to reach the population.

Lessening the Burden

To address the burden of arthritis in Idaho, we must be able to define the problem and the impact that it has on people's daily lives. Surveillance systems need to be established or enhanced, and data gathered and analyzed to direct planning efforts. Communication activities are needed to promote early diagnosis and treatment of arthritis and to dispel myths and misinformation about arthritis. Closely related is the need for education of both people with arthritis and those indirectly affected by it, as well as health care providers working with them. Idaho needs to identify and implement programs that have been tested and proven effective. Policies that address prevention and support appropriate treatment and disease management need to be examined and promoted to reduce the growing burden of arthritis. Health systems and an infrastructure that encompasses public and private sectors that will network resources to improve quality of care, increase access to services and care, and promote prevention need to be identified, expanded and supported. Idaho is committed to addressing each of these areas to improve the lives of Idahoans and reduce the burden of arthritis.

Future Vision

Idaho's vision is to establish a comprehensive arthritis program characterized by a strong public health infrastructure, committed statewide partnerships and collaborative efforts to reduce the burden of arthritis in Idaho. This program will work together with partners statewide to understand the burden of arthritis, to increase arthritis awareness, and implement programs, policies and systems that will effect change.

To accomplish this vision, efforts will include:

- Improving surveillance to define of the problem of arthritis in Idaho.
- Establishing communication channels to relate the importance of early detection, proper treatment and management.
- Identifying and implementing programs, policies and systems that will build a public health infrastructure for program delivery, facilitate access to needed resources, and create an environment conducive to prevention.

The Arthritis Foundation provides an important link in the community to the public and health care providers for resources about arthritis. The Arthritis Foundation Self-Help Course for persons with arthritis has been shown to be an effective program in reducing pain and the costs associated with arthritis.[3] They have many additional educational tools and programs developed but need help in implementing them in Idaho communities. We plan to enhance that link and create a network to support and enhance existing programs.

Goal of the Idaho Arthritis Action Plan

"To reduce the occurrence, impairment, activity limitation, and restriction in social participation due to arthritis and other rheumatic conditions in Idaho."

Plan Development

The development of this plan was a collaborative effort of the Idaho Division of Health, Bureau of Health Promotion and community partners who were invited to participate in the planning process. These organizations and individuals formed the Arthritis Advisory Council (Appendix A). Input was gathered from each council representative and a draft of the state plan was written. Community partners reviewed the plan, provided comments, and made suggestions for revisions. Revisions were made and the plan was printed and distributed in the fall of 2000.

Target Populations

Persons Affected by Arthritis Ages 45 to 64

Interventions can be directed to people with arthritis at all stages of the disease. Measures taken by the health care provider and the patient can improve the current health status of the individual and delay or prevent additional complications. People affected by arthritis need support in accessing the resources they need to cope with their disease.[3]

Persons affected by arthritis will be Idaho's primary target group with interventions focused on secondary and tertiary prevention. Recognizing that this target group consists of persons who may have children, friends, parents, grandparents or other family members affected by arthritis, the educational and arthritis awareness messages will reach others including youth, adults and older adult populations. This comprehensive plan will enhance arthritis awareness in Idaho addressing all of the following levels of prevention:

- Primary Prevention: Prevention of arthritis-related modifiable risk factors.
- Secondary Prevention: Early diagnosis and treatment of arthritis and related rheumatic conditions.
- Tertiary Prevention: Improve the quality of life for persons with arthritis and promote self-management strategies.

Healthcare Providers
Healthcare providers are potentially the first lines of communication directly to the person with or at risk for arthritis. They are in a position to provide early diagnosis and treatment, dispel myths, make recommendations, and impart the importance of appropriate self-management to the patient.

Physicians and other health care providers must have accurate, up-to-date information about arthritis prevention and treatment. Interventions directed at this target population provide the opportunity to increase awareness of appropriate secondary and tertiary treatment of arthritis. Primary prevention strategies can also be addressed to encourage providers to discuss arthritis prevention with their patients such as weight management, physical activity, and occupational and sports injury prevention.[3]

The Public
Early diagnosis and appropriate treatment of arthritis can reduce its impact and increase the number of years of healthy life. Public education messages are needed that are consistent and encourage people to seek early diagnosis and appropriate management. The myths associated with arthritis, such as its acceptance as a normal part of aging and being only seen as an old person's disease, can be dispelled with appropriately designed health communication messages and education.[3]

Settings

Communities

Addressing a major health problem requires more resources and action than any single health agency or organization can provide. Community organizations can play leadership roles in changing health–related community conditions.[5] A community may be defined geographically however, the term can also extend to include specific groups with shared demographic characteristics such as age or ethnicity. Interventions within the defined community can promote changes in attitudes, awareness, health practices, and health policies.[23]

Healthcare Systems

The health care system can be an effective channel for implementing chronic disease control interventions. Health systems include public health agencies, rural health clinics, private physicians and other health practitioners, as well as third-party payer organizations and networks for monitoring and reporting on arthritis in Idaho. All can either directly affect the person with arthritis through contact with the provider or indirectly through the policies created and the use of data to guide program and policy development.[5]

Worksites

The worksite, as an intervention setting, provides multiple opportunities to promote health to a large percentage of the population. Worksites can influence social norms, establish health policies, create environmental supports and provide opportunities to enhance the health knowledge and skills of the workforce.[5]

Strategies and Objectives

Partnerships

Rationale: Partnerships are central to the development and successful implementation of a public health strategy for arthritis.[10] Community partnerships create the opportunity to address the burden of arthritis through a variety of settings, thus promoting arthritis awareness across many different sectors of the community. By creating a network of organizations and individuals with arthritis interests, resources can be pooled, consistent messages can be developed and delivered, and the breadth of the audience needing arthritis-related messages can be thoroughly addressed.[3] This alliance of community partners will strengthen efforts for planning, implementing and evaluating an effective action plan.

Objective 1

Throughout the life of the program, develop and coordinate community partnerships to engage in a statewide comprehensive, cooperative program to reduce the burden of arthritis in Idaho.

Strategies

a. Identify at least three potential community partners with arthritis health interests per year.
b. Recruit at least two new members for the Arthritis Advisory Council per year (membership as of September 2000: 26 council members and 10 liaisons).
c. Hold at least two Arthritis Advisory Council meetings per year.
d. Promote partner activities to reduce the burden of arthritis using at least one communication tool such as the Idahohealth.org web site and other communication activities.

Evaluation Measures

1. Recruitment tools created.
2. Potential community partners with arthritis interests identified.
3. Arthritis Advisory Council list maintained.
4. Evidence of in-kind participation and donation.
5. Arthritis program included on web site and updated regularly with partner activities. Other promotion methods documented.
6. Number of workshops, trainings, informal programs provided, technical assistance provided for partners, number of participants trained, support systems implemented.

Objective 2

By September 2001 and throughout the life of the program, develop plans and integrate arthritis activities with existing Diabetes and Women's Health Check programs to enhance arthritis awareness and prevention without duplication of efforts.

Strategies

a. Identify at least three program commonalties, at least three potential common outreach activities, and at least one common potential target audience between the Arthritis Program, the Women's Health Check Program, and the Diabetes Control Program per year.
b. Identify and implement at least one method per year to integrate the Arthritis Program with Women's Health Check.
c. Identify and implement at least one method per year to integrate the Arthritis Program with the Diabetes Control Program.

Evaluation Measures

1. Planning meetings held at least twice per year with Women's Health Check program staff and Diabetes Control Program staff.
2. Program commonalties identified.
3. Potential collaboration opportunities identified.
4. Implementation plan developed.
5. Integration of common outreach, communication, education, program and/or surveillance opportunities.

Communication and Education

Rationale: Communication and education activities are important for raising the awareness of the target audience about arthritis, its risk factors, prevention, appropriate treatment and self-management. Health communications raise awareness. Health education activities facilitate changes in knowledge, attitudes, beliefs and behaviors that promote health and alleviate arthritis-related problems.

Objective 3

Throughout the life of the program, increase public and professional awareness of arthritis, the importance of early diagnosis, its impact, appropriate management and effective prevention strategies.

Strategies

a. Create, enhance or promote at least one communication and/or educational opportunity per year to increase arthritis awareness for people with arthritis and their families in Idaho.
b. Create, enhance or promote at least one communication and/or educational opportunity per year to increase arthritis awareness for physicians and health professionals in Idaho.
c. Create, enhance or promote at least one communication and/or educational opportunity per year to increase arthritis awareness for the public in Idaho.

Evaluation Measures

1. Media coverage: Instances of coverage by radio, television, and print media; identify frequency and reach of each.
2. Services provided: Number of classes, workshops, support groups, screenings or other informational or educational programs provided, and number of participants in each.
3. Community actions: Record number and type of actions taken outside the Advisory Council activities to promote communication and education in the community related to arthritis.[19]

Objective 4

By September 2001 and throughout the life of the program, collaborate with community partners to support communication activities that dispel arthritis myths, and improve and enhance resource information in Idaho.

Strategies

a. Increase the number of Arthritis Foundation Self-Help Course Educators by at least one per year in Idaho through volunteer recruitment. (In July 2000 there were three leaders in Idaho.)
b. Increase the number of Arthritis Foundation Self-Help Courses offered in Idaho by at least one class per year (one class was offered in 1999).
c. Provide arthritis prevention information to at least one community worksite per year through community partners' existing ergonomics programs.
d. Develop an arthritis awareness media campaign for the general public. Begin implementation of media campaign by May 2002.

Evaluation Measures

1. Number of Self-Help Course leader volunteers recruited.
2. Number of Arthritis Self-Help Course courses offered in Idaho.

3. Number of community partner ergonomics programs identified and information or resources provided.
4. Instances of media garnered, frequency and reach determined.

Objective 5

By September 2001 and throughout the life of the program, link statewide arthritis resources to Utah/Idaho Chapter of the Arthritis Foundation.

Strategies

a. Link Arthritis Program to Arthritis Foundation web site by July 2001 to identify and promote existing arthritis education programs, and maintain current listing throughout the life of the program.
b. Promote utilization of existing Arthritis Programs by creating a resource directory by May 2001, updating regularly, and providing it to health care professionals, community education and training programs, the general public and persons with or affected by arthritis.
c. Collaborate on evaluation of media or other public information campaigns (e.g., increases in requests for information or referrals).

Evaluation Measures

1. Existing education programs, support groups and other resources identified.
2. Resource listing on the Idahohealth.org web site and linked to the Arthritis Foundation web site.
3. Project collaborations held, number of trainings provided, number of materials or other resources provided, data and impact evaluation assistance garnered.

Programs, Policies and Systems

Rationale: In order to reduce the burden of arthritis, approaches must be developed that address systematic change, recognizing that arthritis affects individuals in a social context and that this context can be changed in ways that promote health and prevent disease.[10] Policy and environmental changes that are conducive to prevention efforts need to be developed and implemented.[20] Policies that would enhance arthritis prevention efforts and improve the quality of life for those with or affected by arthritis need to be identified and implemented. Systems such as the public health infrastructure need to be strengthened to support arthritis prevention and intervention activities.[3]

Objective 6

Within five years of program funding, assure the implementation and coordination of effective, integrated programs, policies and systems that will prevent the onset and reduce the burden of arthritis and related disabilities in Idaho.

Strategies

a. Identify at least one program proven effective for the promotion of early diagnosis, appropriate treatment, reduction of pain, and/or self-management to reduce the burden of arthritis by September 2001, and implement as a pilot project by May 2002.
b. Identify at least one policy every other year that if implemented would reduce the burden of arthritis, determine and plan implementation steps and implement plan.
c. Identify at least one health system by September 2001 that if supported or enhanced, would build the infrastructure needed to reduce the burden of arthritis in Idaho. Support and expand health infrastructure throughout the life of the program.

Evaluation Measures

1. Examples of proven programs identified, number implemented and evaluated in Idaho.
2. Examples of policies identified and number implemented.
3. Examples of potential effective health systems and infrastructure identified, enhanced and expanded.

Surveillance and Epidemiology

Rationale: The CDC defines surveillance as "the ongoing collection, analysis and interpretation of health data essential to the planning, implementation and evaluation of public health practice. Surveillance is closely integrated with timely dissemination of these data and their translation into action."[3] Data from the Behavioral Risk Factor Surveillance System and other sources are useful for planning, initiating, and supporting health promotion and disease prevention programs and for monitoring progress toward achieving health objectives.[6] It is a vital part of any health promotion program.

Objective 7

Establish a scientific database on the prevalence and impact of arthritis and related disability within twenty-four months of program funding and maintain database throughout the life of the program.

Strategies

a. Identify at least one arthritis surveillance gap and missing data set by May 2001 and each year thereafter.
b. Improve surveillance of arthritis in Idaho by supporting the Idaho Behavioral Risk Factor Surveillance System Arthritis Module.
c. Identify at least three additional potential data sources by September 2001 and identify methods to gather data from at least one additional source by May 2002. Implement throughout the life of the program or as needed.
d. Identify at least three community partnerships that will assist with data collection and arthritis surveillance in Idaho and create data gathering plan by October 2002.
e. Trend, analyze and report on data gathered and update, as data becomes available. Create an "Arthritis in Idaho" report by September 2003.

Evaluation Measures

1. Surveillance gaps and missing data sets identified.
2. BRFFS Arthritis module in place by January at least every other year and data gathered, compiled, and analyzed on an ongoing basis.
3. Data (e.g., economic impact or other) gathered from other partners and sources, compiled and analyzed on an ongoing basis.

Objective 8

By September 2001, begin to develop a specific arthritis surveillance and monitoring tool(s) to determine the economic and social impact of arthritis in Idaho, and by September 2002 begin implementation and maintain tool(s) throughout the life of the program.

Strategies

a. Evaluate at least three existing private or public health databases to determine value for future arthritis data monitoring by September 2001.
b. Improve surveillance of the quality of life of Idahoans by supporting the Idaho BRFSS Quality of Life module every other year starting 2001.
c. Work with established community partners to acquire input for surveillance tool design and implementation beginning January 2001.
d. Develop a surveillance tool to establish a baseline for arthritis prevalence, social and economic impact by September 2002 and monitor throughout the life of the program.

e. Develop a pilot project with a community partner to administer surveillance tool beginning September 2002.

Evaluation Measures

1. Quality of Life module in place by January 2001, data gathered at least every other year, and analyzed every other year thereafter.
2. Surveillance subcommittee established by January 2001.
3. Pilot project developed by September 2002 and administered in at least one target location or audience.
4. Other data sources identified, data gathered, analyzed and reported.

Evaluation

Rationale: When establishing and maintaining a health promotion program it is important to know if the goals and objectives are being achieved. Evaluation allows the necessary information to be gathered to monitor or demonstrate program effectiveness, or identify the need to improve. Evaluation can direct or refine planning efforts and can help clarify program strategy.[13] Process evaluation monitors the program and determines how it is progressing. Impact evaluation assesses the intermediate and short-term success of interventions. Long-term effects are measured by outcome evaluation measures.[13]

Objective 9

Design, implement and monitor process, impact and outcome evaluation tools for program activity effectiveness and maintain throughout the life of the program.

Strategies

a. Process, impact (intermediate) and distal (outcome) measures will be identified for each objective, related strategy and activity by the finalization of each implementation plan and monitored quarterly.

Evaluation Measures

1. Process and impact measures determined, monitored and reported for each program, and activity throughout the life of the program.
2. Baseline and trend data established through BRFSS by September 2001 and throughout life of program.

APPENDIX A

ARTHRITIS ADVISORY COUNCIL MEMBERS

August 2000

Shirley Alvarez, Administrative Officer
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UT/ID Chapter of the Arthritis Foundation
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Bonnie Christophersen, Program Director
UT/ID Chapter of the Arthritis Foundation
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APPENDIX B

Healthy People 2010 Objectives

Arthritis, Osteoporosis, and Chronic Back Conditions (Chapter 2)

2-1. (Developmental) Increase the mean number of days without severe pain among adults who have chronic joint symptoms.
2-2. Reduce the proportion of adults with chronic joint symptoms who experience a limitation in activity due to arthritis.
2-3. Reduce the proportion of all adults with chronic joint symptoms who have difficulty in performing two or more personal care activities, thereby preserving independence.
2-4. (Developmental[1]) Increase the proportion of adults aged 18 years and older with arthritis who seek help in coping if they experience personal and emotional problems.
2-5. Increase the employment rate among adults with arthritis in the working-age population.
2-6. (Developmental) Eliminate racial disparities in the rate of total knee replacements.
2-7. (Developmental) Increase the proportion of adults who have seen a health care provider for their chronic joint symptoms.
2-8. (Developmental) Increase the proportion of persons with arthritis who have had effective, evidence-based arthritis education as an integral part of the management of their condition.

Second tier objectives (too little data available to be a formal objective)

Increase the proportion of persons with systemic rheumatic disease who receive an early specific diagnosis and appropriate management plan.

Increase the proportion of hospitals, managed care organizations, and large group practices that provide effective, evidence-based arthritis education for patients to use as an integral part of the management of their condition.

Increase the proportion of persons at risk for or who have arthritis who receive counseling from their health care provider about weight control and physical activity to prevent arthritis-related disabilities.

Related objectives from other focus areas (persons with arthritis are a targeted subgroup)

[1]Developmental objectives are qualitative or descriptive in nature and generally do not provide a numeric value as a target. Quantitative measurement systems are under development but not yet available for application. Qualitative objectives do however, provide a "vision" for a desired outcome or health status. Currently available surveillance systems and databases do not provide quantitative measures for these objectives. Inclusion of such objectives is expected to identify focus areas that are important and are also intended to motivate the development of national data systems through which they can be monitored.

Nutrition and overweight (Chapter 19)

1-1. Increase the proportion of adults who are at a healthy weight.
1-2. Reduce the proportion of adults who are obese.

Physical activity and fitness (Chapter 22)

1-1. Reduce the proportion of adults who engage in no leisure-time physical activity.
1-2. Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.
1-3. Increase the proportion of adults who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.[21]

References

1. American College of Rheumatology (1995). *Guideline for the Medical Management of Osteoarthritis, Part I & II*. Arthritis and Rheumatism, 38/11, 1535-1546.

2. American College of Rheumatology (2000). *Fact sheet: Exercise and Arthritis*. www.rheumatology.org/patients/factsheet/exercise.html.

3. Arthritis Foundation, ASTHO, CDC (1999). *National Arthritis Action Plan*. Atlanta, GA.

4. Briley, M. (1998). *Why Me?* Arthritis Today, January/February 1998. Atlanta, GA.

5. Brownson, R.C., Remington, P.L., Davis, J.R. (1998). *Chronic Disease Epidemiology and Control*. American Public Health Association, Washington, D.C.

6. Center for Vital Records and Health Statistics (2000). *Idaho Behavioral Risk Factors: Results from the 1999 Behavioral Risk Factor Surveillance System*. Idaho Department of Health and Welfare. Boise, ID.

7. Center for Vital Records and Health Statistics (1999). *Idaho's Health: A Summary of Health Factors, Status, Systems, and Services*. Idaho Department of Health and Welfare, Boise, ID.

8. Center for Vital Records and Health Statistics (2000). *Idaho Vital Statistics*. Idaho Department of Health and Welfare. Boise, ID.

9. Idaho Department of Health and Welfare (1998). *Healthy Heart Series: Physical Activity*. Boise, ID.

10. Meenan, R. F., Callahan, L. F., and Helmick, C.G. (1999). *The National Arthritis Action Plan*: A public health strategy for a looming epidemic. American College of Rheumatology, 12/2, 79-81.

11. Morbidity Mortality Weekly Review (1994). *Arthritis Prevalence and Activity Limitations-United States, 1990*. CDC, 1994:43(24): 433-438.

12. Morbidity Mortality Weekly Review (1995). *Prevalence and Impact of Arthritis Among Women-United States, 1989-1991*. CDC, 1995;44/17:329-334.

13. Morbidity Mortality Weekly Review (1999). *Framework for Program Evaluation in Public Health*. CDC, 1999: 48 (RR11): 1-40.

14. Morbidity Mortality Weekly Review (1999). *Impact of Arthritis and other Rheumatic Conditions on the Health-care System-United States, 1997*. CDC, 1999; 48(17): 349-353.

15. Morbidity Mortality Weekly Review (2000). *Health-related Quality of Life Among Adults with Arthritis-Behavioral Risk Factor Surveillance System, 11 States, 1996-1998*. CDC, 2000; 49: 366-369.

16. National Institutes of Health. *Questions and Answers About Arthritis and Rheumatic Diseases*. Bethesda, MD.

17. National Institutes of Health (1998). *Searching for the Cause*. National Institute of Arthritis and Musculoskeletal and Skin Diseases, Bethesda, MD.

18. National Institutes of Health (1998). *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults*. National Heart, Lung, and Blood Institute, Bethesda, MD.

19. U.S. Department of Health and Human Services (1995). *Evaluation Community Efforts to Prevent Cardiovascular Diseases*. Centers for Disease Control and Prevention, Atlanta, GA.

20. U.S. Department of Health and Human Services (1998*). Targeting Arthritis: The Nation's Leading Cause of Disability*. Atlanta, GA.

21. U.S. Department of Health and Human Services (Fall 1999). *Arthritis Now a Public Health Priority*. Chronic Disease Notes & Reports. Atlanta, GA.

22. U.S. Department of Health and Human Services (2000). *Healthy People 2010: Focus Area 2, Arthritis, Osteoporosis and Chronic Back Conditions*, Washington, D.C.

23. U.S. Department of Health and Human Services. *Planned Approach to Community Health: A Guide for the Local Coordinator*. National Center for Chronic Disease Prevention and Health Promotion, CDC, Atlanta, GA.